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July 16, 1982

Ms. Lisa J. Thorvig
Soil Scientist
Division of Solid Waste
Minnesota Pollution Control Agency
1935 West County Road B-2
Roseville, Minnesota 55113

Dear Ms. Thorvig:

Enclosed are copies of the well and boring logs for the St. Peter storm sewer tunnel in southeast Minneapolis which we have received from the Minneapolis Department of Public Works and the Minnesota Department of Transportation. From the accompanying map showing the portion of the storm sewer tunnel system in the vicinity of the former General Mills site, you will see that there are four different types of holes placed for this project. These are as follows:

1. Drill Holes -- These were 12- to 36-inch diameter cased holes which were drilled into the St. Peter to check the alignment of the tunnels. These holes were done by Tri-State Drilling Co.; their method of drilling apparently was that a rotary rig would sink one hole to the Platteville and then a new crew and rig would come in to complete the hole. In this way, they may have missed the Decorah which will have been present above the Platteville in places. We were supplied with well logs for Drill holes A, 1 through 5, 8, 10, and 11. Copies of these logs are attached. These holes have been abandoned already.

2. Shaft Holes -- These are 72- to 96-inch diameter holes which intersect the tunnel. They were designed for access to the storm sewer tunnel during and after construction and, thus, still exist. We have received no logs for their construction or the stratigraphy encountered.

3. Wells -- These were 16-inch diameter screened wells completed in the St. Peter along the tunnel route and were used for dewatering the St. Peter during the construction of the tunnel. Unfortunately, these wells were all abandoned in the fall, 1981. We were supplied with well logs prepared by Tri-State Drilling Co. for Wells 2 through 10. A copy of these logs are attached.

4. Test Holes -- These were borings placed along the tunnel corridor by the Minnesota Department of Transportation for the Minneapolis Department of Public Works. These were drilled apparently by the mud rotary method to bedrock and cored into the St. Peter Sandstone.

One-inch piezometers were then installed in these holes in the St. Peter and Platteville aquifers. The logs for these borings and piezometers are designated TP-1 through TP-6 and are also attached.

Water levels were measured in the piezometers from 1970 to 1980 by Wayne Helm (724-4650). The water measurements that were provided to us are also included in this packet. The piezometer nests at TP-1, TP-5, and TP-6 are still in existence.

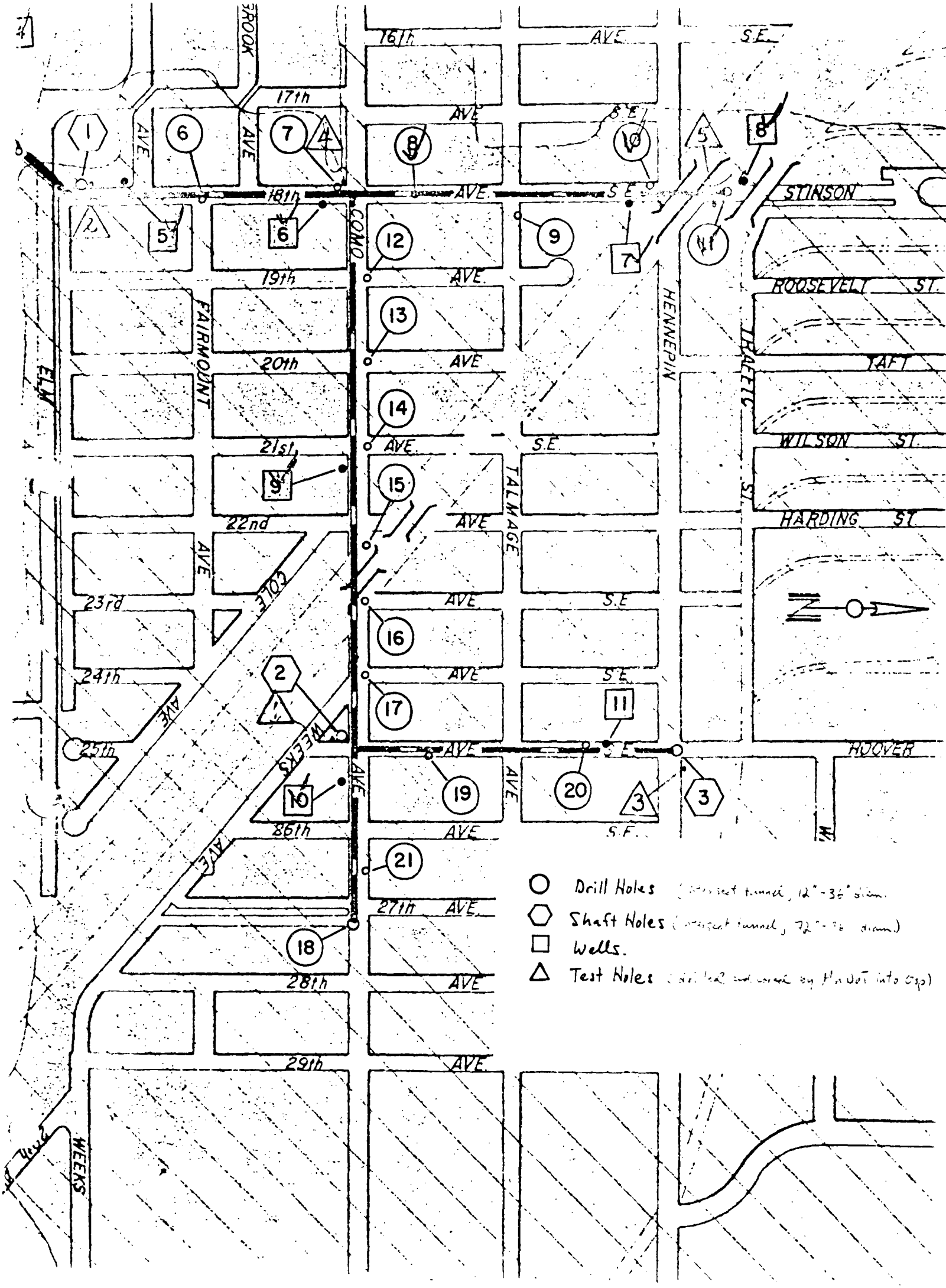
The tunnel construction continued intermittently from 1974 to 1981. Construction began at the river and worked to the north and east from there. A set of blueprint plans for the project were provided to us by the City. A set of these plans could be obtained by contacting Mr. Leonard Krumm of the Minneapolis Department of Public Works (348-2421) and asking for the blueprints for Como Avenue Storm Drain Tunnel Sewer Project No. 7047, Sheets 1 through 19.

This comprises all of the information and materials that we have collected to date on this tunnel project. There is another pre-existing storm sewer tunnel project of similar design just west of this one, along 35W. This one apparently leaks badly, otherwise this storm sewer project would have connected to it. Should you have any other questions about this material, please feel free to call me. Otherwise, we have found Mr. Krumm to be a good source of information on this project.

Sincerely,

Kelton D. Barr

KDB/yc
Enclosure


16th AVE S.E.
17th AVE
18th AVE S.E.
19th AVE
20th AVE
21st AVE S.E.
22nd AVE
23rd AVE S.E.
24th AVE
25th AVE S.E.
26th AVE
27th AVE
28th AVE
29th AVE
BROOK AVE
ELM AVE
FAIRMOUNT AVE
COMO AVE
TALMAGE AVE
HENNEPIN
TRAFFIC ST
STINSON
ROOSEVELT ST.
TAFT
WILSON ST.
HARDING ST.
HOOVER
WEEKS
3702
Drill Holes (intersect tunnel, 12"-36" diam.)
Shaft Holes (intersect tunnel, 72"-96" diam.)
Wells.
Test Holes (drilled and cased by Mn DOT into Gsp)